

Abstract of the Disclosure

5 This invention discloses improved single antenna interference cancellation (SAIC) receivers utilizing joint channel estimation for suppression of interference of co-channel signals. This invention describes the technique to perform joint channel estimation for either synchronous or asynchronous co-channel signals without a prior knowledge of the interfering training sequence or its timing position. The invented joint channel estimation can require initial detection of the desired signal and can be implemented as a multistage equalization structure.